

## IN THE CLAIMS

1. (Cancelled)

2. (Cancelled)

3. (Previously amended) The improvement of claim 8 wherein said first heat exchanger comprises at least one heat exchange element.

4. (Previously amended) The improvement of claim 8 wherein said first heat exchanger has a flow path therein, and further comprising a heat transfer medium flowing through said first heat exchanger in said flow path.

6. (Previously amended) The improvement of claim 8 wherein said first heat exchanger comprises at least two heat exchange elements, and, further comprising a covering proceeding circumferentially around said rotational axis and disposed between said at least two heat exchange elements.

7. (Cancelled)

8. (Previously amended) In an X-ray examination arrangement having an X-ray source mounted at a gantry which is rotatable around a rotational axis, the improvement of a cooling arrangement for said X-ray source comprising:

a first annular heat exchanger disposed at said gantry and in thermally conductive connection with said X-ray source, and rotatable around said rotational axis together with said gantry;

a second annular heat exchanger disposed in a thermally conductive, annular path with said first heat exchanger, with said first heat exchanger transferring heat from said X-ray source to said second heat exchanger

directly via said annular path, said second heat exchanger being stationary relative to said first heat exchanger; and

a plurality of inter-engaging annular guide devices for guiding an airstream, generated by rotation of said first heat exchanger and heated at said first heat exchanger, from said first heat exchanger to said second heat exchanger.

9. (Cancelled)

10. (Original) The improvement of claim 8, wherein said second heat exchanger is annularly disposed around said first heat exchanger.

11. (Original) The improvement of claim 8, wherein said second heat exchanger is disposed axially offset, along said rotational axis, from said first heat exchanger and is attached to said first heat exchanger.

12. (Original) The improvement of claim 8, wherein said second heat exchanger comprises at least one heat exchange element.

13. (Original) The improvement of claim 8, wherein said second heat exchanger comprises at least two annular heat exchange elements that are thermally conductively connected to each other.

14. (Previously amended) The improvement of claim 13, further comprising a covering proceeding circumferentially around said rotational axis and disposed between said at least two heat exchange elements of said second heat exchanger.

15. (Original) The improvement of claim 8, wherein said second heat exchanger has a flow path therein, and further comprising a heat transfer medium flowing through said second heat exchanger in said flow path.

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17. (Previously amended) A computed tomography apparatus comprising:

a gantry rotatable around a rotational axis;

an X-ray source and an X-ray detector mounted opposite to each other on said gantry, said X-ray source emitting heat during operation thereof;

a first annular heat exchanger disposed at said gantry and rotatable with said gantry around said rotational axis, and having at least two heat exchange elements thermally conductively connected to each other, with at least one of said heat exchange elements being thermally conductively connected to said X-ray source for transferring said heat from said X-ray source;

a second heat exchanger disposed in a thermally conductive path relative to said first heat exchanger, with said first heat exchanger transferring heat from said X-ray source to said second heat exchanger directly via said thermally conductive path and said second heat exchanger transferring said heat transferred from said first heat exchanger to an exterior of said gantry; and

a plurality of inter-engaging annular guide devices for guiding an airstream, generated by rotation of said first heat exchanger and heated at said first heat exchanger, from said first heat exchanger to said second heat exchanger.

18. (Cancelled)

19. (Cancelled)

20. (Previously amended) A computed tomography apparatus comprising:

- a gantry rotatable around a rotational axis;
- an X-ray source and an X-ray detector mounted opposite to each other on said gantry, said X-ray source emitting heat during operation thereof;
- a first annular heat exchanger disposed at said gantry and rotatable together with said gantry around said rotational axis, and thermally conductively connected to said X-ray source;
- a second heat exchanger disposed in a thermally conductive path with said first heat exchanger, with said first heat exchanger transferring heat from said X-ray source to said second heat exchanger directly via said thermally conductive path, and said second heat exchanger being stationary relative to said first heat exchanger; and
- a plurality of inter-engaging annular guide devices for guiding an airstream, generated by rotation of said first heat exchanger and heated at said first heat exchanger, from said first heat exchanger to said second heat exchanger.

21. (Cancelled)

22. (Cancelled)